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09/673,628	12/08/2000	Masato Higashi	43890-448	3423

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Mcdermott Will & Emery  
600 13th Street NW  
Washington, DC 20005-3096

EXAMINER

RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/673,628

Applicant(s)

HIGASHI, MASATO

Examiner

Sam Rimell

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

Preliminary Note: This office action includes new grounds of rejection which are based on prior art not previously of record. Accordingly, this office action is made non-final.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Machida (U.S. Patent 6,209,606).

Claim 1: FIG. 1 illustrates a computer system. The computer system is composed of a plurality of disk devices (30-1 through 30-n). FIGS. 6-7 illustrate an updating program that updates firmware from a reference disk to a replaced disk. Step S5 of FIG. 6 is further detailed in FIG. 7, and shows that the updating of firmware is performed after the a parameter (version number) of the reference disk is compared to a version number of the replaced disk (steps S15-S17). If the version number of the reference disk is higher, the firmware is updated to the replaced disk (steps S5 through S8 of FIG. 6).

Claim 2: FIGS. 6-7 illustrate method steps for updating firmware in a system having a plurality of disk devices (FIG. 1, disks 30-1 through 30-n). Step S1 is the starting step. Step s& involves transmitting the firmware update from the first memory of one of the disk devices (the memory of the reference disk) to a second memory (transfer buffer 107). The second step involves transmitting the firmware update from the second memory (transfer buffer 107) to the

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updated disk (replaced disk). The second memory can further receive additional updated firmware when additional disks are to be updated.

Claim 3: As seen in FIG. 5, each disk has stored specific information.. This specific information includes a model name (Type A), and revision number showing a version of the firmware (version number 0003, for example). As seen in step S16 in FIG. 7, the programming assures that the latest revision number is applied to the replaced disk. The actual transmission of the latest revision is accomplished at steps S7-S8 in FIG. 6.

Claim 4: As seen in FIG. 5, the specific information for each disk includes a model name (Type A) and version number (version number 0003, for example). In following the steps of FIGS. 6-7, the reference disk will have a different revision number than the replaced disk. At the same time, model numbers of the disks may be the same (FIG. 5 and col. 8, lines 36-37).

Claim 5: See remarks for claim 4. Note that version numbers fall within a revision number range from 0001 to 0003 (See FIGS. 8A-8D which illustrates the ranges of revision numbers).

Claim 6: See remarks for claim 4. Note that the updated firmware will have the latest revision number (steps S15 through S17 of FIG. 7) as well as be within a range of revision numbers (FIGS. 8A-8D).

Claim 7: The program steps of FIGS. 6-7 are invoked when the system is on.

Claim 8: FIG. 1 illustrates a computer system/ FIGS. 6-7 is an update program for updating firmware of the disk devices. The disk themselves define first memory. The buffer (107) is second memory. The updated firmware is transmitted from the reference disk to the

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second memory (buffer memory 107) and then from the second memory (buffer memory 107) to a replaced disk.

Claim 10: As seen in FIG. 7, the system compares a parameter (version number) of the reference disk to a parameter (version number) of the replaced disk. If the version number of the reference disk is higher, the version on the reference disk is transmitted to the replaced disk.


Claim 11: See remarks for claim 10.

Claim 12: The second memory is the transfer buffer 107 shown in S7 of FIG. 6 and stores the firmware while it is being transferred to the replaced disk.

Remarks

Applicant's arguments are moot in light of the new grounds of rejection. This office action is made non-final.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.

  
Sam Rimell  
Primary Examiner  
Art Unit 2175